

**TRANSMITTAL  
FORM**

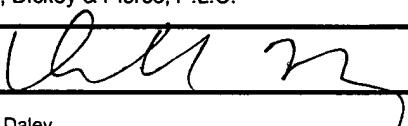
(to be used for all correspondence after initial filing)

Application Number	10/565,276
Filing Date	January 20, 2006
First Named Inventor	Patrick GEHLEN et al.
Art Unit	2121
Examiner Name	Gami, Tejal
Attorney Docket Number	32860-000989/US

**ENCLOSURES (check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Technology Center (TC)
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Petition	<input checked="" type="checkbox"/> Appeal Communication to TC (Notice of Appeal)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	<b>Remarks</b>	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

**MAIL STOP: AF****SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Harness, Dickey & Pierce, P.L.C.		
Signature			
Printed name	Donald J. Daley		
Date	October 20, 2008	Reg. No.	34,313

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PATENT TRADEMARK OFFICE

# FEE TRANSMITTAL for FY 2009

Effective 2/8/2006. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 540)

Complete if Known	
Application Number	10/565,276
Filing Date	January 20, 2006
First Named Inventor	Patrick GEHLEN et al.
Examiner Name	Gami, Tejal
Art Unit	2121
Attorney Docket No.	32860-000989/US

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money  Other  None  
Order
 Deposit Account:

Deposit Account Number 08-0750

Deposit Account Name Harness, Dickey & Pierce, P.L.C.

## The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1011 330	2011 165	Utility filing fee			
1012 220	2012 110	Design filing fee			
1013 220	2013 110	Plant filing fee			
1014 330	2014 165	Reissue filing fee			
1005 220	2005 110	Provisional filing fee			

SUBTOTAL (1) (\$ 0)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims	Fee from below	Fee Paid
Total Claims	<span style="border: 1px solid black; padding: 2px;">14</span>	-20 **	= <span style="border: 1px solid black; padding: 2px;">0</span>	X <span style="border: 1px solid black; padding: 2px;">52</span> = <span style="border: 1px solid black; padding: 2px;">0</span>
Independent Claims	<span style="border: 1px solid black; padding: 2px;">1</span>	-3 **	= <span style="border: 1px solid black; padding: 2px;">0</span>	X <span style="border: 1px solid black; padding: 2px;">220</span> = <span style="border: 1px solid black; padding: 2px;">0</span>
Multiple Dependent				= <span style="border: 1px solid black; padding: 2px;">0</span>

## Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202 52	2202 26	Claims in excess of 20		
1201 220	2201 110	Independent claims in excess of 3		
1203 390	2203 195	Multiple dependent claim, if not paid		
1204 220	2204 110	** Reissue independent claims over original patent		
1205 52	2205 26	** Reissue claims in excess of 20 and over original patent		

SUBTOTAL (2) (\$ 0)

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath			
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet			
1053 130	1053 130	Non-English specification			
1812 2,520	1812 2,520	For filing a request for reexamination			
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action			
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action			
1251 130	2251 65	Extension for reply within first month			
1252 490	2252 245	Extension for reply within second month			
1253 1,110	2253 555	Extension for reply within third month			
1254 1,730	2254 865	Extension for reply within fourth month			
1255 2,350	2255 1,175	Extension for reply within fifth month			
1401 540	2401 270	Notice of Appeal			
1402 540	2402 270	Filing a brief in support of an appeal	540		
1403 1,080	2403 540	Request for oral hearing			
1452 540	2452 270	Petition to revive - unavoidable			
1453 1,620	2453 810	Petition to revive - unintentional			
1462 400	1462 400	Petition fee under 37 CFR 1.17(f)			
1463 200	1463 200	Petition fee under 37 CFR 1.17(g)			
1464 130	1464 130	Petition fee under 37 CFR 1.17(h)			
1807 50	1807 50	Processing fee under 37 CFR 1.17 (q)			
1806 180	1806 180	Submission of Information Disclosure Stmt			
8021 40	8021 40	Recording each patent assignment per property (times number of properties)			
1809 810	2809 405	Filing a submission after final rejection (37 CFR § 1.129(a))			
1810 810	2810 405	For each additional invention to be examined (37 CFR § 1.129(b))			
1801 810	2801 405	Request for Continued Examination (RCE)			
Other fee (specify) _____					
*Reduced by Basic Filing Fee Paid				SUBTOTAL (3)	<span style="border: 1px solid black; padding: 2px;">(\$ 540)</span>
4. SEARCH/EXAMINATION FEES					
1111 540	2111 270	Utility Search Fee			
1112 100	2112 50	Design Search Fee			
1113 330	2113 165	Plant Search Fee			
1114 540	2114 270	Reissue Search Fee			
1311 220	2311 110	Utility Examination Fee			
1312 140	2312 70	Design Examination Fee			
1313 170	2313 85	Plant Examination Fee			
1314 650	2314 325	Reissue Examination Fee			
				SUBTOTAL (4)	<span style="border: 1px solid black; padding: 2px;">(\$ 0)</span>

\*or number previously paid, if greater; For Reissues, see above

SUBMITTED BY		Complete (if applicable)		
Name (Print/Type)	Donald J. Daley	Registration No. Attorney/Agent	34,313	Telephone 703-668-8000
Signature			Date	December 22, 2008

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PATENT  
32860-000989/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPELLANTS: Patrick GEHLEN et al. CONF. NO.: 7963  
APPL'N NO.: 10/565,276 GROUP: 2121  
FILED: January 20, 2006 EXAMINER: Tejal Gami  
FOR: COUPLING DEVICE FOR THREE BUS SYSTEMS

**APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37**

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Randolph Building  
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December 22, 2008

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

**I. REAL PARTY IN INTEREST:**

The real party in interest is Siemens Aktiengesellschaft.

**II. RELATED APPEALS AND INTERFERENCES**

No related appeals or interferences are known.

12/23/2008 AWONDAF1 00000008 10565276

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**III. STATUS OF CLAIMS:**

Claims 1-14 stand rejected under 35 U.S.C. § 102 as allegedly anticipated by U.S. Patent No. 6,449,715 ("Krivoshein"). Final Office Action for U.S. Appl. No. 10/565,276, p. 2, June 18, 2008.

Claims 1-14 are being appealed.

**IV. STATUS OF AMENDMENTS:**

The Reply After Final filed September 18, 2008 has been entered and considered by the Examiner. Advisory Action for U.S. Appl. No. 10/565,276, Sept. 29, 2008.

**V. SUMMARY OF CLAIMED SUBJECT MATTER:**

**A. CONCISE EXPLANATION OF THE SUBJECT MATTER SET FORTH IN EACH INDEPENDENT CLAIM ARGUED SEPARATELY.**

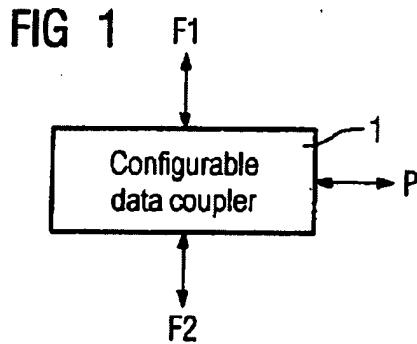
1. A general discussion of the subject matter described in the specification to assist the Board in understanding example embodiments described in the present application.

Conventionally, different bus systems must be coupled to one another for numerous applications. In doing so, standard data must be distinguished from safety-relevant or security-relevant data when transmitting between bus systems. Conventionally, so-called "links" are used for coupling different bus systems, but these links are not configurable.

Example embodiments provide coupling apparatuses for bus systems having multiple different-types of buses. The coupling apparatuses enable data to be input and output in the immediate vicinity of the apparatus without significantly reducing system reaction time and without significantly loading the system. At least one example embodiment enables a central module to access data from three or more bus systems.

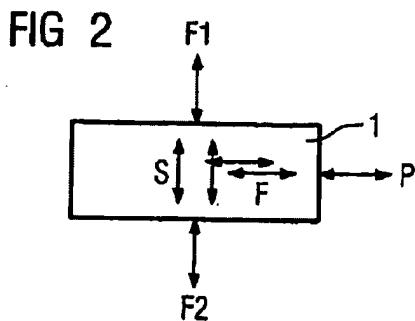
In addition, a coupling apparatus according to at least one example embodiment is advantageously configurable. Configurability makes it possible to distinguish between data to be transmitted between the bus systems. For example, the coupling apparatus may be configured such that the data transfer between two or three of the data buses is controlled as a function of the semantics of the data to be transmitted. Accordingly, it is possible to configure the transmission of standard data differently from the transmission of safety-relevant or security-relevant data.

Figure 1 (reproduced below for the Board's convenience) shows a circuit diagram of a coupling apparatus according to an example embodiment.



As shown in Figure 1, a data coupler 1 is connected between three buses. The buses include two fieldbuses F1 and F2, and an internal peripheral bus P. The data coupler 1 is configured via the internal peripheral bus P for data transfer between each of the three buses F1, F2 and P.

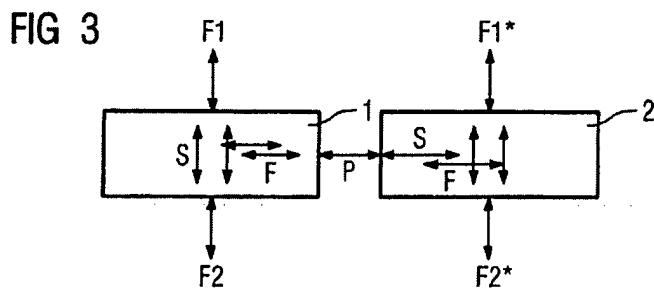
Figure 2 (also reproduced below) shows an example data flow between the three buses F1, F2, and P.



As shown in Figure 2, standard data S and safety-relevant or security-relevant data F may be interchanged between the data buses F1,

F2, and P. In one example, the safety-relevant or security-relevant data and/or standard data may be output on the buses F1 and F2 via an output unit to the peripheral bus, and/or safety-relevant or security-relevant data and/or standard data may be read from the peripheral bus P (via an input unit) and passed to the buses F1 and/or F2.

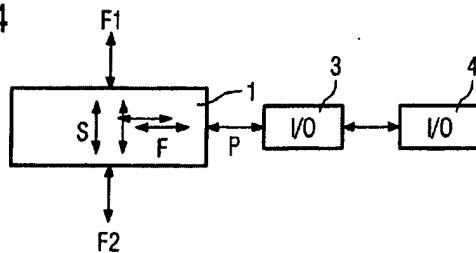
Figure 3 (also shown below) shows the coupling of two fieldbus systems F1, F2 and F1\*, F2\* via the peripheral bus P.



As shown, a first data coupler 1 and a second data coupler 2 are connected to one another via their peripheral bus interface P. Accordingly, all four fieldbuses F1, F2, F1\* and F2\* are capable of interchanging standard data S as well as safety-relevant and security-relevant data F with one another. In this case as well, the two data couplers 1 and 2 are capable of being configured as required for data transfer of standard data and safety-relevant or security-relevant data.

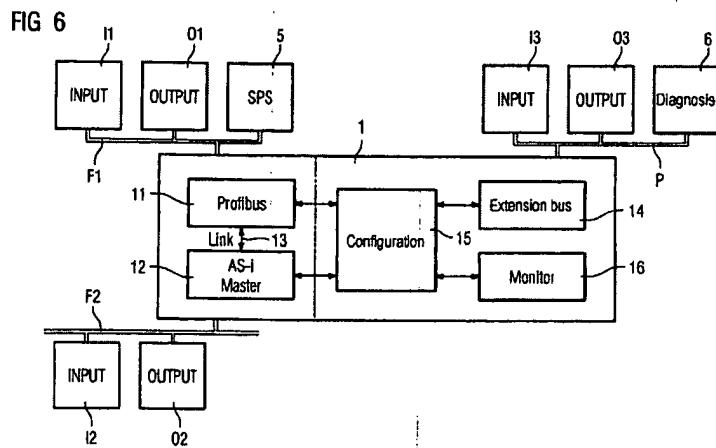
Figure 4 shows the data flowchart for one example configuration.

FIG 4



As shown, the data coupler 1 is connected to a plurality of input/output assemblies 3, 4 via the peripheral bus P. Information is input/output to/from the other buses via these assemblies 3, 4. An appropriate configuration allows individual in-situ processing of the data in addition to the definition of the data as mentioned above, which is transmitted between the connected data buses. With an appropriate hardware and software configuration, safety-relevant or security-relevant data can also be transmitted and/or processed. The direct connection of the input/output assemblies 3, 4 via the peripheral bus P to the data coupler 1 means that there is no need to connect such assemblies to the fieldbuses F1 and F2 in the vicinity of the data coupler 1. This makes it possible, for example, to reduce the load on the PLC of a Profibus.

Figure 6 (also reproduced below) illustrates a more specific example embodiment of a plurality of data buses F1, F2, P connected to a coupling apparatus 1.



Referring to Figure 6, the data coupler 1 includes a Profibus interface 11 connected to a Profibus (fieldbus F1), and an AS-i master 12 as an interface to an AS-i bus (fieldbus F2). The Profibus interface 11 and the AS-i master 12 are connected to one another via a link 13. An extension or peripheral bus interface 14 connects the data coupler 1 to the peripheral bus P. All of the interfaces 11, 12 and 14 are configurable via an internal configuration unit 15. The data coupler 1 enables data to be transferred between the three buses F1, F2, and P, each of which are of a different type.

The coupling apparatus according to at least one example embodiment makes it possible to provide a pure AS-i safety or security monitor with an internal communication interface for connection of further I/O modules, with any desired number of outputs. Furthermore, the coupling apparatus according to at least one example embodiment makes it possible to provide AS-i safety or security monitors with an internal

communication interface for connection of further I/O modules and with a Profibus connection as a configuration interface and diagnosis unit, or with an AS-i connection or with a Profibus/Profisafe and AS-i connection.

2. An explanation of the subject matter set forth in each independent claim argued separately referring to the specification and/or the drawings by reference characters in accordance with 37 C.F.R. § 41.37(c)(1)(v).

Claim 1 is directed to a coupling apparatus (e.g., 1 in FIG. 6) for data buses. *See, generally*, Appellants' Substitute Specification filed January 20, 2006, p. 2, ll. 14-24; p. 4, l. 18 – p. 7, l. 35. The coupling apparatus 1 includes a first connecting device (e.g., 11) for a first data bus (e.g., F1). *See, e.g.*, Sub. Spec. at p. 2, ll. 15-16; p. 6, l. 25-26. The coupling apparatus 1 further includes a second connecting device (e.g., 12) for a second data bus (e.g., F2) in addition to the first connecting device 11. *See, e.g.*, Sub. Spec. at p. 2, ll. 16-18; p. 6, l. 26-27. A data processing device (e.g., 15) is connected to the first and the second connecting devices 11 and 12 to allow data to be interchanged between the field buses F1 and F2. *See, e.g.*, Sub. Spec. at p. 2, ll. 18-20. A third connecting device (e.g., 14) for a third data bus (e.g., P) is connected to the data processing device 15 to allow data to be interchanged between the three data buses. *See, e.g.*, Sub. Spec. at p. 2, ll. 18-20, *see also*, FIG. 6. The first data bus F1, the second data bus F2, and the third data bus P are different types of bus systems. *See, e.g.*, FIG. 6 and Sub. Spec. at p. 2, ll. 23-24.

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U.S. Application No. 10/565,276  
Atty Docket No. 32860-000989/US

Claim 3 further clarifies that the coupling apparatus 1 is configurable in such a way that the data transfer between at least two of the data buses F1, F2, P is controllable as a function of the semantics of the data to be transmitted. *See, e.g.*, Sub. Spec. at p. 2, l. 30 – p. 3, l. 5.

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.**

Appellant seeks the Board's review of the rejection of claims 1-14 under 35 U.S.C. § 102 as allegedly anticipated by U.S. Patent No. 6,449,715 ("Krivoshein") as set forth on pages 2-5 of the June 18, 2008 Final Office Action.

**Claims 1-14 are being appealed.**

**Claims 1-2, 4-11, and 13-14 rise and fall together.**

**Claims 3 and 12 rise and fall together.**

**VII. ARGUMENT.**

**KRIVOSHEIN FAILS TO ANTICIPATE CLAIMS 1-14**

Beginning on page 2 of the June 18, 2008 Final Office Action, claims 1-14 stand rejected under 35 U.S.C. § 102 as anticipated by Krivoshein. Appellants request the Board overturn the Examiner's rejection for the following reasons.

Krivoshein cannot anticipate claim 1 unless the reference expressly or inherently describes each and every element set forth in the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), see also, MPEP § 2131. Claim 1 requires, *inter alia*, "a data processing device," connected at least three connecting devices, "to allow data to be interchanged between the data buses," wherein "the second data bus is a different type of bus system than the first data bus, and the third data bus is a different type of bus system than the first data bus and the second data bus." As discussed in more detail below, this feature is not disclosed or suggested by Krivoshein, and therefore, Krivoshein fails to anticipate claim 1.

In rejecting claim 1, page 3 of the June 18, 2008 Final Office Action states in-part:

Krivoshein discloses[...]

a data processing device (e.g., controller 12) (see Figure 1) [...] to allow data to be interchanged between the three data buses (see Col. 7, Lines 42-47)...

As is readily apparent, the controller 12 of Krivoshein is relied upon to disclose the "data processing device," of claim 1, and column 7, lines 42-47 is relied upon to disclose the interchanging of data between three different buses. Appellants disagree with this conclusion.

Although Krivoshein discloses multiple different buses (e.g., buses of a Fieldbus device network 30, a HART device network 32, a Profibus device

network 34, and an AS-Interface device network 36), Krivoshein fails to disclose that these devices are connected together in the manner required by claim 1. Namely, Krivoshein fails to disclose *a data processing device connecting data buses of different types of bus systems to allow data to be interchanged between the data buses.* At most, Krivoshein discloses a configuration system including a controller 12 that separately controls devices on different device networks, without exchanging data between the devices on different device networks.

In somewhat more detail, Krivoshein at FIGS. 1 and 2 discloses a configuration system including a controller 12 that separately controls different types of field devices using different communication protocols based on a common configuration database 72. Krivoshein at 5:45-48. The configuration database 72 stores configuration for all the devices within the process control system. Id. at 60-63. Krivoshein does not, however, disclose that its configuration enables data to be exchanged *between the different data buses* (i.e., the Profibus, the FieldBus, the AS-i bus, etc.), or that the data buses of the different data bus systems can exchange data through the controller 12. Again, at most, the controller 12 separately controls the devices in each different device network. Krivoshein does not disclose that data is exchanged between the different device networks in any way.

Particularly with respect to the portions of Krivoshein referenced in the current Office Action (e.g., at page 3), column 7, lines 42-47 state:

The controller 12 is coupled to numerous field devices within different device networks, including a Fieldbus device network 30, a HART device network 32, a Profibus device network 34 and an AS-Interface device network 36 via local connections or lines.

The Examiner interprets this portion of Krivoshein as disclosing the ability to exchange data between the different buses. But, at most, the cited portion of Krivoshein merely discloses that the controller is *coupled to* each of these device networks. The mere fact that the controller 12 is coupled to the device networks does not teach (either implicitly or explicitly) that the controller 12 enables the device networks to exchange data with one another. Indeed, in the context of Krivoshein, the controller 12 is coupled to each of the different device networks so as to separately control them, not to allow data to be exchanged between the device networks.

The controller 12 may be a central connection point for the device networks, but absent any disclosure describing the manner in which is exchanged between these distinctly different device networks, one cannot conclude that the different device networks exchange data with one another. While the controller 12 itself is capable of separately controlling different types of field devices using different communication protocols based on a common configuration database (Krivoshein at 5:45-48), Krivoshein does not disclose that such capability enables the *different*

*device networks in Krivoshein to exchange information with one another.*

In further discussing the capabilities of the controller 12, column 7, lines 51-56 of Krivoshein states:

The controller 12 implements or oversees one or more process control routines stored therein or otherwise associated therewith and communicates with devices within the device networks 30, 32, 34 and 36 and with the host workstations 14 to control a process and to provide information pertaining to the process to a user.

This portion of Krivoshein also fails to disclose or fairly suggest that the controller 12 allows data to be interchanged *between* the device networks 30, 32, 34, 36 (or the bus systems used therein for that matter).

At most, this portion of Krivoshein merely discloses that the controller 12 allows the user to separately control processes within each of the device networks 30, 32, 34 and 36, and to receive information pertaining to processes separately from each of the device networks 30, 32, 34 and 36.

Indeed, the absence of any mention that the controller 12 allows data to be exchanged *between the device networks* 30, 32, 34 and 36 supports the conclusion that the controller 12 is *not* capable of doing so.

In response to the above arguments against the rejection of claim 1, in the Advisory Action dated September 29, 2008 states:

In addition to portions of the prior art disclosed in the previous office action, see, Col. 11, Lines 25 to 28 for "controller 12 may be communicatively coupled to one or more different device networks"; and Col. 11, Line 62 to Col. 12, Line 2 for "controller 12 to communicate with the master devices 44, 48, 55 and 60 to obtain signals needed to send control signals to devices according to a control routine.

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Based on the above cited portions of Krivoshein, the Examiner concludes that the controller 12 allows data to be interchanged between data buses. Appellants disagree.

Column 11, lines 25 – 28 of Krivoshein state:

Likewise, more than one controller 12 can be coupled to the system 10 and each controller 12 may be communicatively coupled to one or more different device networks.

Moreover, column 11, line 62 – column 12, line 2 of Krivoshein states:

...the user still had to configure each of the master I/O devices 44, 48, 53 and 66 to communicate with the devices on the associated bus and then had to configure the controller 12 to communicate with the master devices 44, 48, 55 and 60 to obtain the signals needed to run the control routine within the controller 12 or to send output or control signals to devices according to a control routine within the controller 12.

These portions of Krivoshein are no more relevant than the cited portions of Krivoshein discussed *supra*. Column 11, lines 25-28 and column 11, line 62 – column 12, line 2 of Krivoshein merely disclose that the controller can separately communicate with each of the data buses to which it is connected. Indeed, as discussed above, the controller 12 of Krivoshein allows the user to *separately control* processes within each of the device networks 30, 32, 34 and 36, and to receive information pertaining to processes separately from each of the device networks 30, 32, 34 and 36. But, Krivoshein does not disclose or fairly suggest that the

controller 12 *allows data to be exchanged between the device networks 30, 32, 34 and 36*

For at least the foregoing reasons, Krivoshein fails to disclose at least, "*a data processing device*," connected at least three connecting devices, "*to allow data to be interchanged between the data buses*," wherein "*the second data bus is a different type of bus system than the first data bus, and the third data bus is a different type of bus system than the first data bus and the second data bus*." Because Krivoshein fails to disclose or suggest this feature, the reference fails to anticipate claim 1 and the rejection of this claim under 35 U.S.C. § 102 should be overturned.

*Verdegaal Bros.*, 814 F.2d at 631, 2 USPQ2d at 1053. Krivoshein fails to anticipate claims 2-14 at least by virtue of their dependency from claim 1. Thus, the rejection of these claims should be overturned as well.

**KRIVOSHEIN FAILS TO ANTICIPATE CLAIMS 3 AND 12 FOR THE FOLLOWING ADDITIONAL REASONS**

In addition to the reasons set forth above with regard to claim 1, Krivoshein fails to anticipate claim 3 for the reasons set forth below.

On page 4 of the Final Office Action, in rejecting claim 3, the Examiner alleges that the Abstract of Krivoshein discloses *semantics* of the data to be transmitted; relying primarily on the mention of "protocol." Appellants disagree with the Examiner's conclusion.

The protocol mentioned in the Abstract of Krivoshein is not the same as the "semantics," of claim 3. For example, Appellants' Substitute Specification at least at paragraph page 2, line 30 – page 3, line 5 discloses that the coupling apparatus may be configured in such a way that the data transfer between two or three of the data buses may be controlled as a function of the semantics of the data to be transmitted, for example, it may be possible to configure the transmission of standard data differently to that for the transmission of safety-relevant or security-relevant data. Accordingly, example embodiments allow for the transfer of data to be controlled based on the semantics of the data, e.g., the type of data to be transferred.

The portion of the Abstract of Krivoshein discussing "protocol," states:

A configuration system for use in a process control network having a controller, a first device network that communicates using a first input/output protocol, such as a Fieldbus or a HART device protocol, and a Profibus network that communicates using a Profibus input/output communication protocol ...

The first instance of "protocol" in the Abstract of Krivoshein refers to the communication protocol of the first device network device (e.g., a Fieldbus or a HART device). The second instance of "protocol" refers to the Profibus communication protocol used to communicate with the Profibus network. But, at most, "protocol" refers to the format in which a type of data is communicated, not the type of data itself. Therefore, the "protocol"

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37  
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discussed in this (or any) portion of Krivoshein does not constitute the "semantics of the data," e.g., type of data to be transferred.

For at least the foregoing reasons, Appellants respectfully submit that Krivoshein fails to disclose, teach or suggest at least the feature, "*the coupling apparatus is configurable in such a way that the data transfer between at least two of the data buses is controllable as a function of the semantics of the data to be transmitted,*" of dependent claim 3. Because Krivoshein fails to disclose this feature, Krivoshein fails to anticipate claim 3. *Verdegaal Bros.*, 814 F.2d at 631, 2 USPQ2d at 1053. Krivoshein fails to anticipate claim 12 at least by virtue of its dependency from claim 3.

**VIII. CLAIMS APPENDIX.**

An appendix containing a copy of the claims involved in the appeal is attached.

**IX. EVIDENCE APPENDIX.**

An appendix containing copies of any evidence submitted pursuant to §§ **1.130**, **1.131**, or **1.132** of this title or of any other evidence entered by the examiner and relied upon by appellant in the appeal, along with a statement setting forth where in the record that evidence was entered in the record by the Examiner is attached.

**X. RELATED PROCEEDINGS APPENDIX.**

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

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An appendix containing copies of decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of this section is attached.

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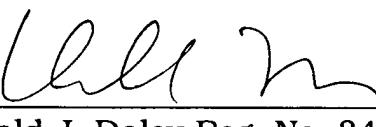
**CONCLUSION**

In light of the foregoing arguments, Appellant respectfully requests the Board to reverse the Examiner's rejection of claims 1-14.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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**VIII. CLAIMS APPENDIX.**

**Claims on Appeal:**

1. A coupling apparatus for data buses, comprising:
  - a first connecting device for a first data bus;
  - a second connecting device for a second data bus, as additional to the first connecting device;
  - a data processing device, connected to the first and the second connecting device to allow data to be interchanged between the data buses; and
  - a third connecting device, connected to the data processing device, for a third data bus, as additional to the first and second data buses, to allow data to be interchanged between the three data buses, wherein
    - the second data bus is a different type of bus system than the first data bus, and
    - the third data bus is a different type of bus system than the first data bus and the second data bus.
2. The coupling apparatus as claimed in claim 1, wherein the coupling apparatus is configurable.

3. The coupling apparatus as claimed in claim 2, wherein the coupling apparatus is configurable in such a way that the data transfer between at least two of the data buses is controllable as a function of the semantics of the data to be transmitted.
4. The coupling apparatus as claimed in claim 1, wherein the first data bus is a Profibus.
5. The coupling apparatus as claimed in claim 1, wherein the second data bus is an AS-i bus.
6. The coupling apparatus as claimed in claim 1, wherein at least one of input and output modules are connectable to the third data bus and are linkable to at least one of the first and the second data bus with the aid of the coupling apparatus.
7. The coupling apparatus as claimed in claim 1, including a monitor with a configuration capability.

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8. The coupling apparatus as claimed in claim 2, wherein the first data bus is a Profibus.

9. The coupling apparatus as claimed in claim 2, wherein the second data bus is an AS-i bus.

10. The coupling apparatus as claimed in claim 3, wherein the first data bus is a Profibus.

11. The coupling apparatus as claimed in claim 3, wherein the second data bus is an AS-i bus.

12. The coupling apparatus as claimed in claim 4, wherein the second data bus is an AS-i bus.

13. The coupling apparatus as claimed in claim 2, wherein input/output modules are connectable to the third data bus and are linkable to at least one of the first and the second data bus with the aid of the coupling apparatus.

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14. The coupling apparatus as claimed in claim 1, including a monitor with a configuration capability.

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**IX. EVIDENCE APPENDIX.**

None.

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**X. RELATED PROCEEDINGS APPENDIX.**

None.